

The Universe

Universe – Contains everything including: galaxies, stars, planets, gases, dust, and time itself.

Galaxies – 100 billion known to date. Contain collection of stars, gas, dust, planets, moons, asteroids, and comets. (Milky Way – our galaxy).

Solar System – Sun at the center with planets, asteroids, and comets orbiting the Sun. Moons orbit planets.

Planets – Sun at the center with planets, asteroids, and comets orbiting the Sun. Moons orbit planets.

Conditions to be a Planet:

1. Must orbit a star.
2. Be large enough that gravitational forces have turned it into a sphere.
3. Be large enough to have cleared objects out of its path.

Rocky Planets – Four inner planets are made of heavier material and have rock bases.

Mercury, Venus, Earth, and Mars.

Gas Giants – Four outer planets are made of lighter gas material and have no solid base.

Jupiter, Saturn, Uranus, and Neptune.

My Very Educated Mother Just Served Us Nachos

Moons – Large bodies of rock or ice that orbit planets. 178 moons.

Asteroids – Large rocks that orbit the Sun. Asteroid belt between Mars and Jupiter.

Meteoroids – Smaller rocks created when two asteroids collide.

Meteorite – When a meteoroid doesn't burn up in the atmosphere and actually lands on Earth.

Comet – Large body made up of ice, dust, and a black carbon goo that orbit the Sun in a very elliptical fashion.

Conditions a Planet Must Meet In Order to Support Life

- Large enough to support an atmosphere
- Correct distance from a star so that the temperature range allows water to exist in all three states: solid, liquid, and gas.